UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C., 20460

OFFICE OF CHEMICAL SAFETY
AND
POLLUTION PREVENTION

PC Codes: 079021 (potassium)
031801 (ammonium)

DP Barcodes:
Potassium salts: 395859, 390987, 395860, 390989, 396782, 396781, 395854, 388702, 395850, 388713, 395848, 390990, 395844, 388715

Ammonium salts: 388725, 388730, 388731, 388735, 388736, 388739, 388740

DATE: April 2, 2013

MEMORANDUM

SUBJECT: Data Evaluation Records (DERs) for Potassium and Ammonium Salts of Fatty Acids (grouped as Soap Salts (case 4083))

FROM: Stephen Carey, Biologist
Environmental Risk Branch VI/EFED 4/2/13

THRU: Mark Corbin, Branch Chief
Environmental Risk Branch VI/EFED (7507P) 4-3-13

TO: Monica Wait, Chemical Review Manager (RM 53)
Patricia Parrot, Branch chief, RMIB3
Pesticide Re-evaluation Division (7508P)

SUMMARY

Environmental Fate and Effects Division (EFED) has completed its review of ecological effects data submitted by the Soap Salts Re-registration Task Force (Miracle Grow, Woodstream, Dow, Agro-K, Safer, and Pathway Holdings) and Neudorff on potassium and ammonium salts of fatty acids known as soap salts. **Tables 1 and 2** summarize the classification and toxicity endpoints of the ecological effects studies for the active ingredients, potassium and ammonium salts of fatty acids, respectively.

In addition, several ecological effects studies were submitted several years ago for soap salts and have not been reviewed by the Agency; thus, DERs have been completed for those studies. Likewise, some DERs that were completed several years ago are updated to today's standards. **Table 3** summarizes the DERs that were not previously reviewed or updated to today's standards with its study classification and toxicity endpoints of the active ingredients.

Copies of the respective data evaluation records are attached.

Ammonium	42806406 (850.1010)	Freshwater invertebrate acute toxicity	EC_{50}: 27.1 mg a.i./L	Supplemental	The study appears to not been reviewed by the Agency; thus, a DER based on today's standards was recently completed. The study is classified as supplemental since the study authors did not analyze the test solutions for the presence of the active ingredient or formulation especially when immobility was observed.
Ammonium	42806407 (850.3020)	Honeybee contact toxicity	LD_{50}: >262 µg a.i./bee	Acceptable	The study appears to not been reviewed by the Agency; thus, a DER based on today's standards was recently completed. The study is classified as acceptable.
Ammonium	44760402 (850.1010)	Freshwater invertebrate acute toxicity	EC_{50}: 30.9 mg a.i./L	Supplemental	The study appears to not been reviewed by the Agency; thus, a DER based on today's standards was recently completed. The study is classified as supplemental due to high variability detected during analytical verification within the two lowest treatment levels and contamination occurred in the negative control test solution; reducing the confidence or soundness of the results.
Ammonium	44766401 (850.3020 & Non-GLN Oral)	Honeybee contact and oral toxicity	LD_{50}: >100 µg a.i./bee	Acceptable	The study appears to not been reviewed by the Agency; thus, a DER based on today's standards was recently completed. The study is classified as acceptable.
Ammonium	46206301 (850.2200)	Avian dietary toxicity	LC_{50}: >1,100 mg a.i./kg diet	Supplemental	The study appears to not been reviewed by the Agency; thus, a DER based on today's standards was recently completed. The study is classified as supplemental due to no chemical analyses of the formulation or active ingredient. In addition, the highest concentration was below 5000 mg a.i./kg diet when adjusted for purity.

[1]**OPPIN Classifications:**

Acceptable; Acceptable/Guideline; Acceptable/Non-Guideline; Cited; Confirmatory; Decision Deferred; Extraneous submission; Guideline; In Review; minimum; No Decision; Partially Acceptable; Satisfactory; Screened-acceptable for review; Screened-not acceptable; Supplemental; Supplemental/Non-Guideline; Unacceptable; Unacceptable/Guideline; Unacceptable/Non-Guideline; Upgradeable.